

Georgia Vector-Borne Disease Update, 2005



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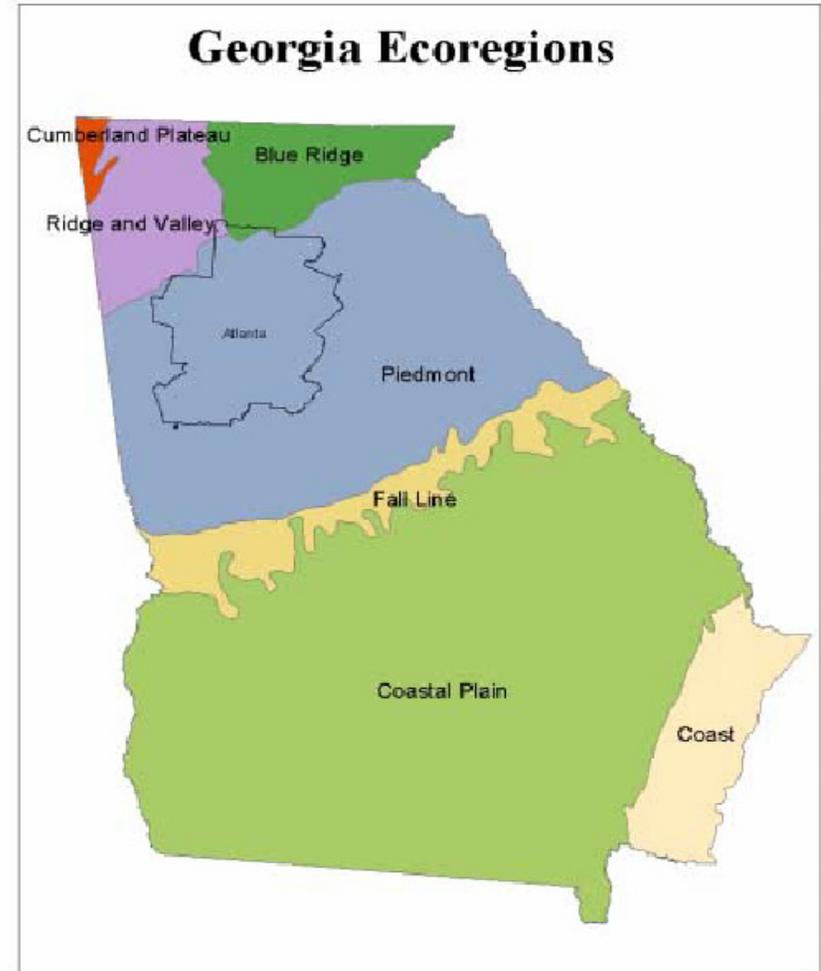
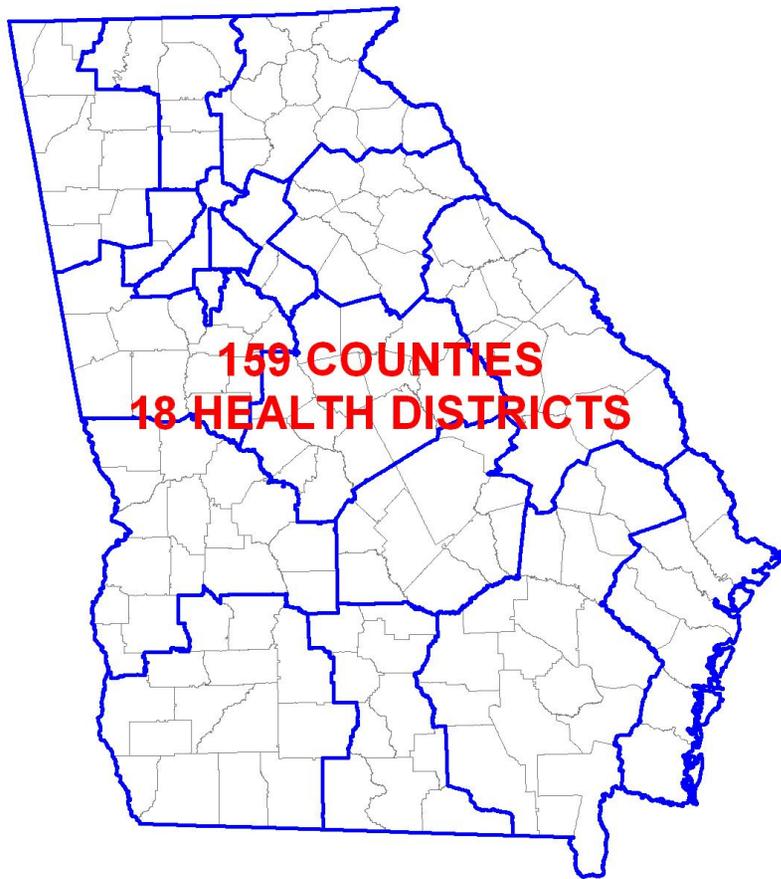
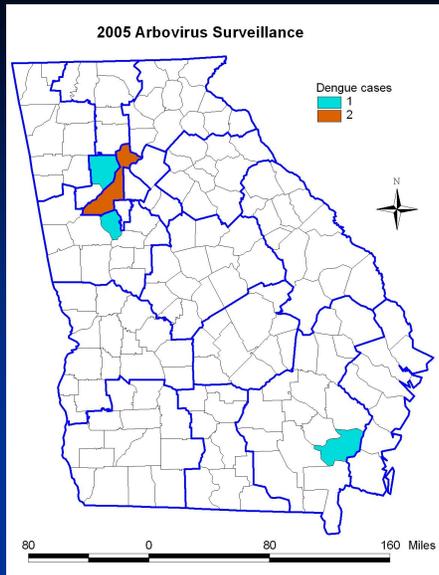
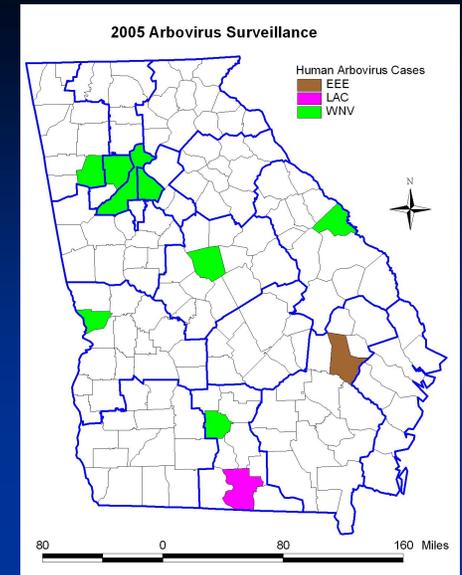


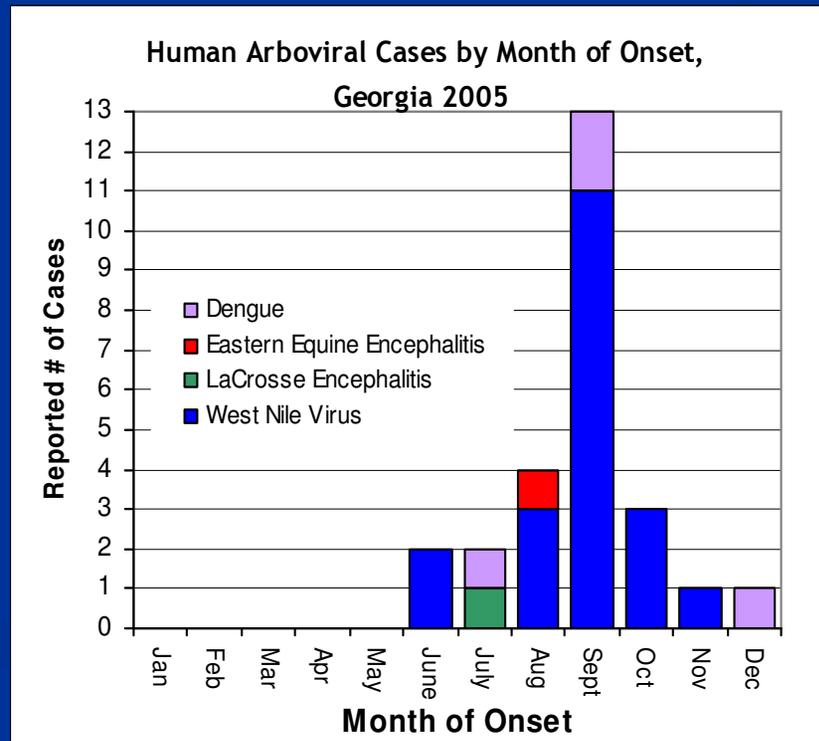
Figure 1. Ecoregion map of Georgia used for classification and accuracy assessment work. Based upon Keyes et al.



Human Arboviral Cases, 2005

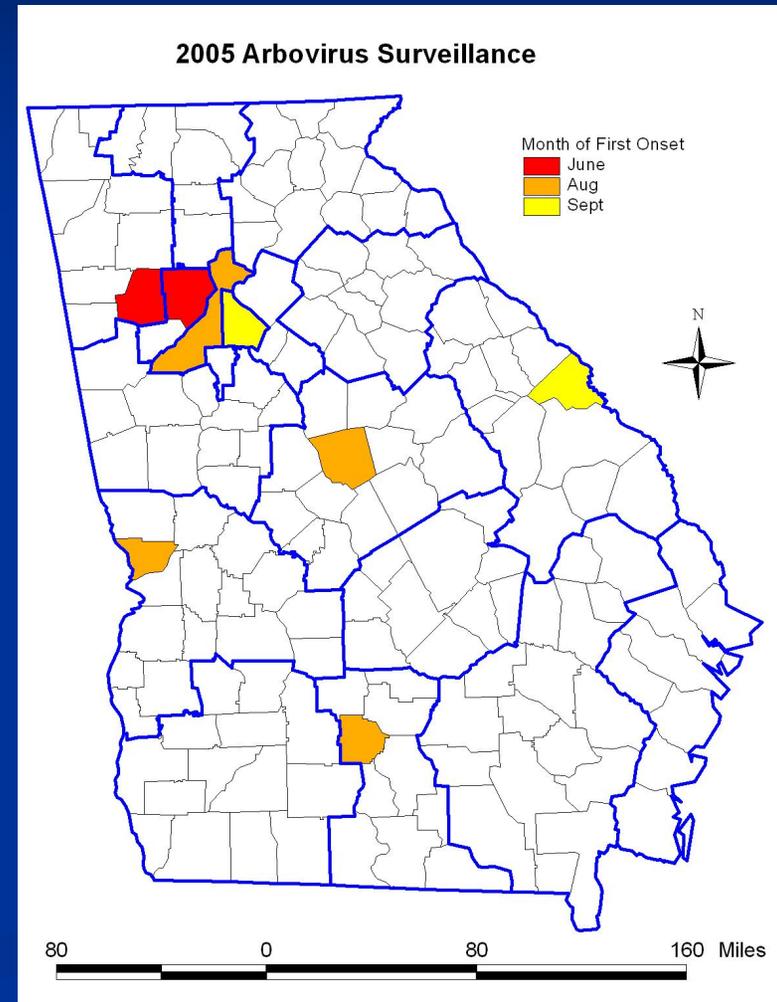


- 5 cases of internationally acquired Dengue fever
- 1 case of EEE
- 1 case of LaCrosse Encephalitis
- 24 cases of WNV



Human West Nile Virus, 2005

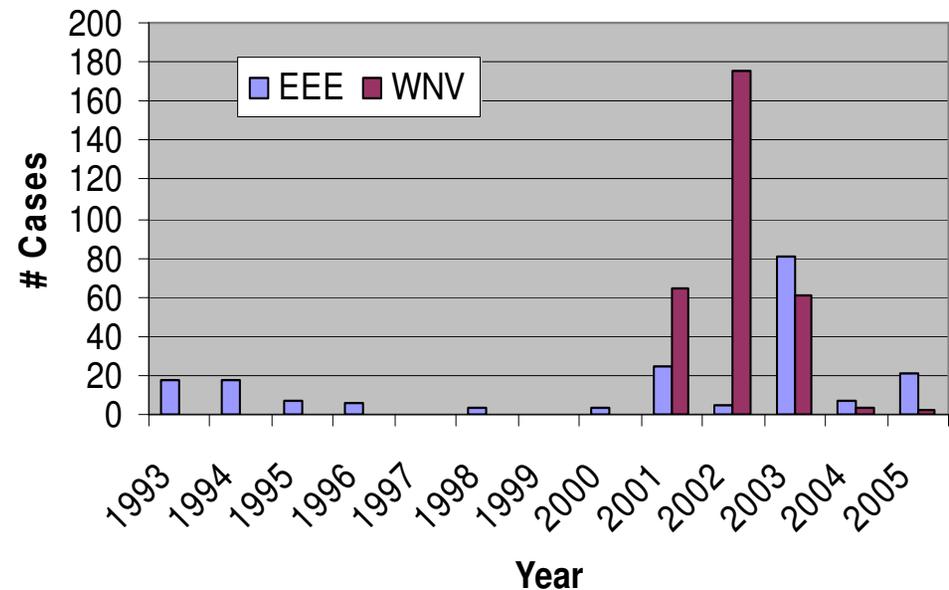
- 24 cases, 2 deaths
 - 12 WNV neurologic illness
 - 7 WNV fever
 - 4 WNV positive viremic blood donors
 - 1 lost to follow up (symptoms not recorded)
- The average age of cases was 53 years (range 15-87)
- The average age of those who experienced neurologic illness was 57 years (range 15-83)
- The ages of the fatal cases were 63 and 87
- Eighteen (75%) of the 24 cases were male



Equine Arboviral Cases, 2005

- 20 horses tested positive for EEE
- 1 horse was co-infected with EEE and WNV
- 1 horse tested positive for WNV
- 85% of the EEE+ horses with known outcome died or were euthanized

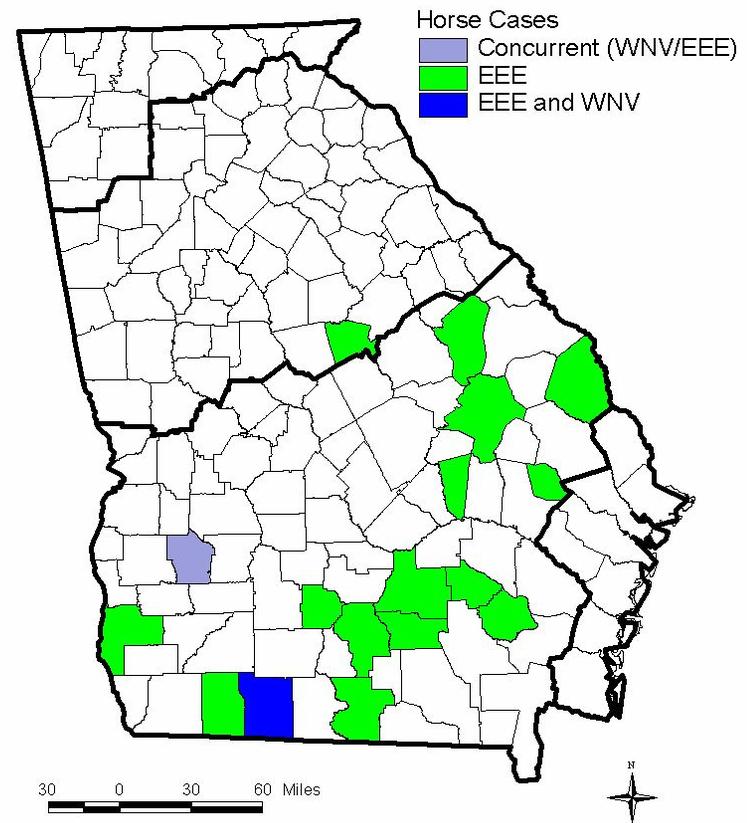
EEE and WNV Cases in Horses, Georgia 1993-2005



Equine Arboviral Cases, 2005

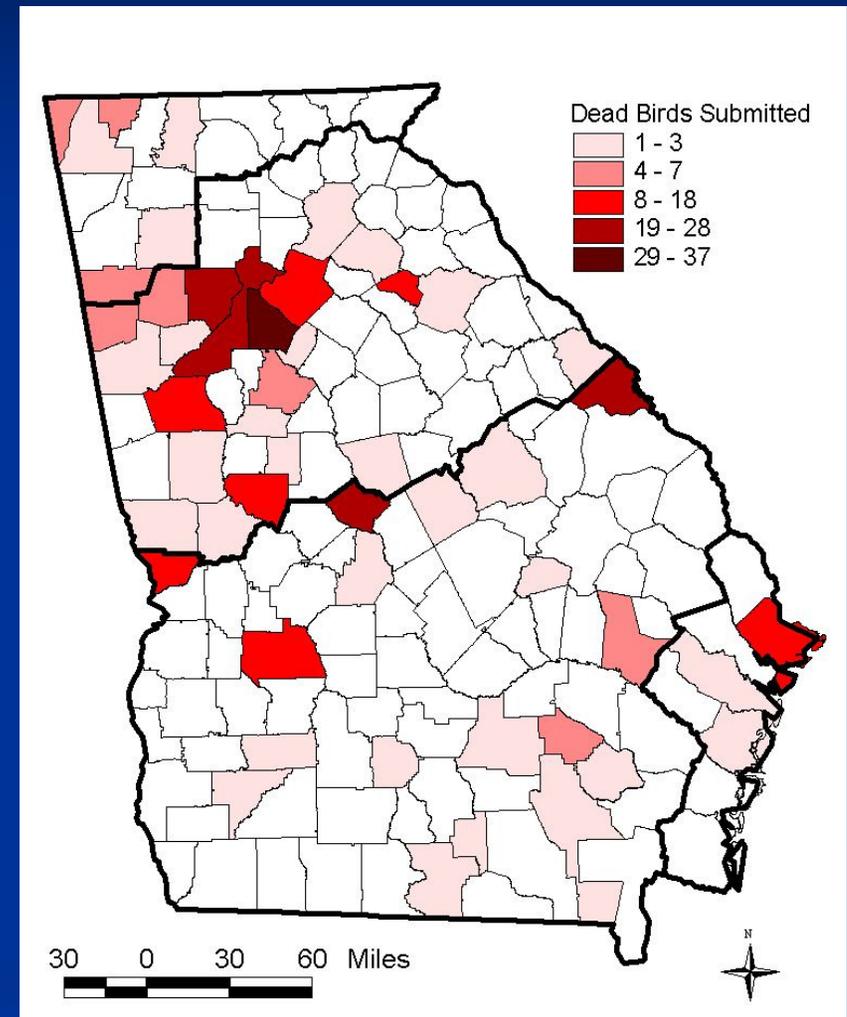
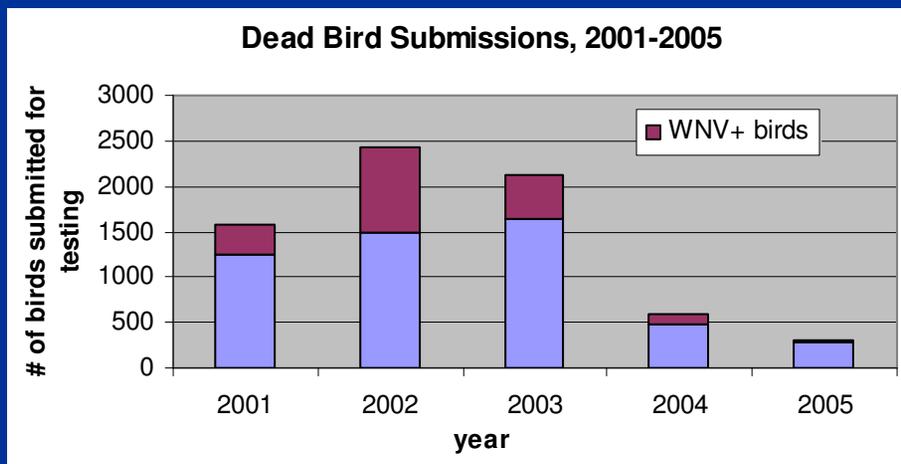
- EEE is endemic below the “Fall Line”
- There are an average of 5 horse cases per year in this area
- Cases outside this area indicate a potential for an epidemic situation

Arboviral Surveillance, 2005



Dead Bird Surveillance, 2005

- 310 birds submitted for testing from 50 counties
- 65 species of birds submitted for testing
- Submissions WAY down from previous years

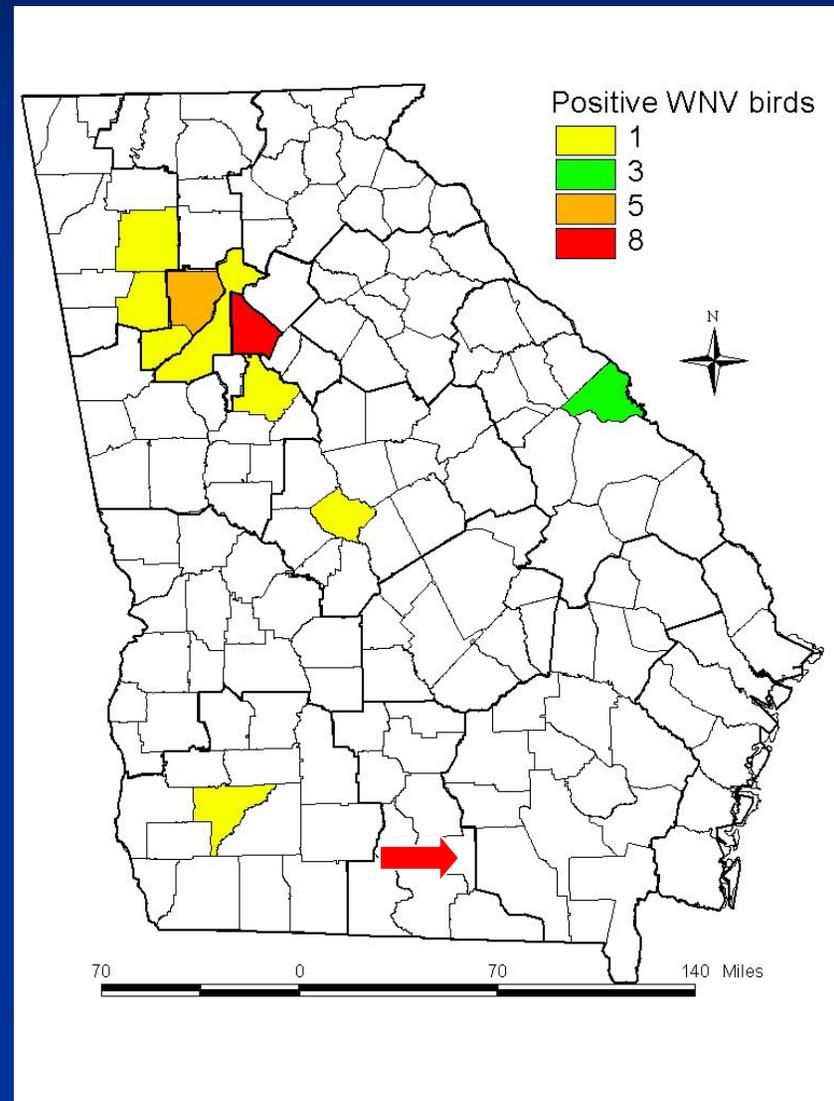


Dead Bird Surveillance, 2005

- 23 birds tested positive for WNV from 10 counties
 - First positive was at the beginning of August
- 5 species tested positive for WNV

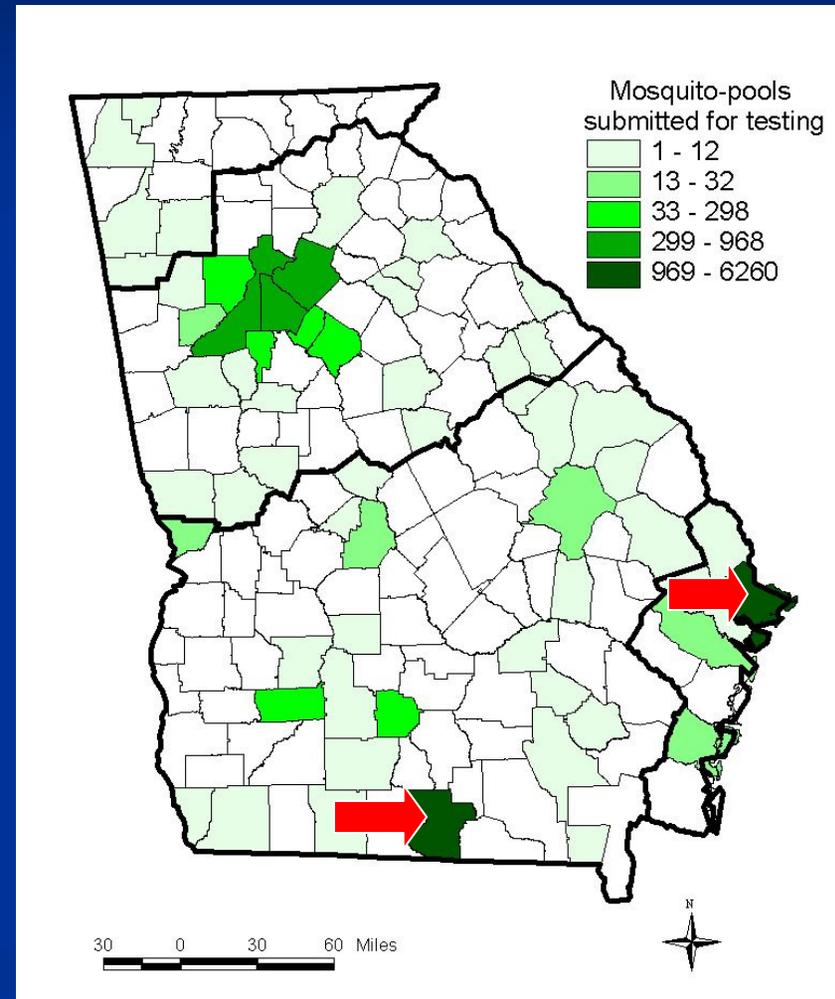
Virus Isolation	Species	Count	% Positive
POS-WNV	American Crow	8	35%
POS-WNV	American Robin	1	6%
POS-WNV	Blue Jay	12	38%
POS-WNV	Carolina Chickadee	1	100%
POS-WNV	Red-shouldered Hawk	1	25%

- Flock of quail tested EEE positive in Lanier County in April



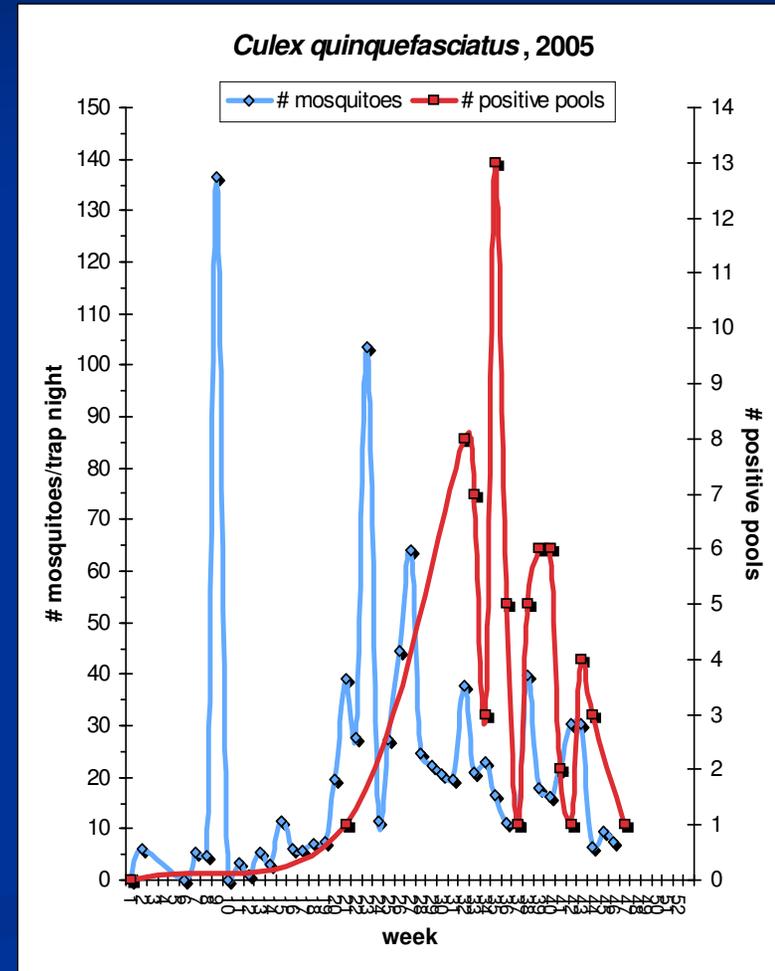
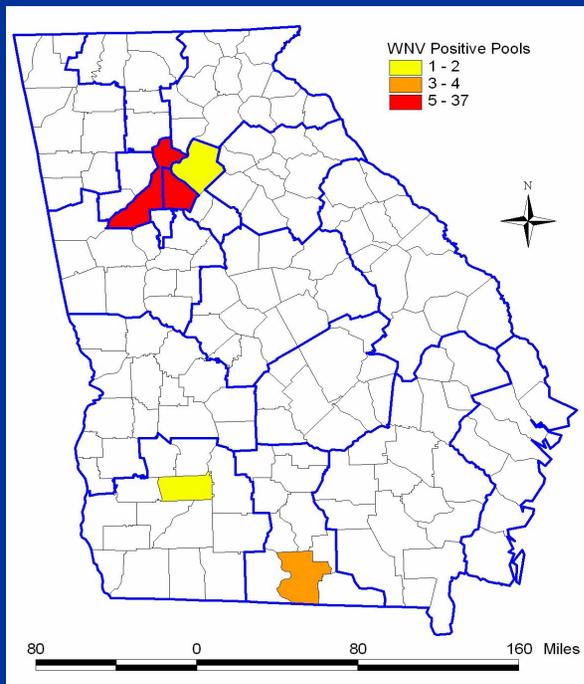
Mosquito Surveillance, 2005

- 59 counties submitted mosquitoes for testing
- 15,263 pools submitted for testing
- 23 species of mosquitoes tested
- 8 pools tested positive for EEE from the end of May to the end of July



Mosquito Surveillance, 2005

- 67 WNV positive pools from 5 Georgia counties
- 96% of all WNV positive pools consisted of *Culex quinquefasciatus*

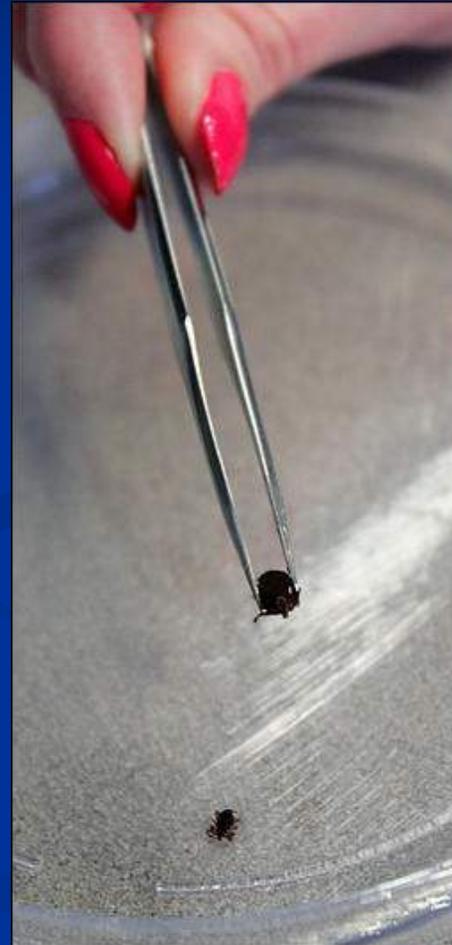


Ongoing Projects

- Fulton County Community Clean-up Project
- Combined Sewer Overflow Project with Fulton and the Centers for Disease Control and Prevention
- Georgia Department of Public Health Tick Attach Study
- Head Lice Manual
- Bed Bug Handbook for Environmental Health Specialists

Tick Attach Study

- Began April 2005
(revived old study)
- Accepting ticks that have been **ATTACHED** to **PEOPLE** for species identification and testing



Tick Attach Study

■ Partners

- Georgia Division of Public Health
- Georgia Poison Center
- University of Georgia

■ Objectives

- **Better characterize the epidemiology** of tick-borne diseases in Georgia by describing prevalence of infected ticks
- **Estimate the importance** of various tick species regarding human disease
- **Identify regions** in Georgia where risk of acquiring tick-borne disease is greatest

Tick Attach Study

- Person finds an attached tick and calls Georgia Poison Center (GPC)
- GPC explains tick removal (if not already done) and asks if they want to be involved in study
- If yes, person mails the tick (in rubbing alcohol) to GDPH
- GDPH de-identifies and send specimen to UGA for ID and testing
 - Ticks will be tested for the bacteria that cause RMSF, HME, HGE, Lyme, STARI, and tularemia depending on species
- Epidemiologist will call 3 weeks later and administer q'aire of exposures and symptoms and will report results of tick testing when it's done

Advertising

- Press release resulting in stories in
 - Newspapers
 - Atlanta Journal-Constitution front page Metro section
 - Other local papers throughout Georgia
 - Radio
 - Georgia Public Radio
 - News/morning shows
 - TV news
 - Websites
 - State, District, and County Health Departments
 - Lyme Disease Association
 - Promoting outdoor activities

Advertising (cont.)

- Partnered with DNR
 - Brochures to state parks and wildlife mgmt areas
 - Posters for deer check stations
 - Press release for outdoor news media
- E-mail to public health workers across the state
 - Cavers list-serv
 - Extension offices
 - Boy/girl scouts
 - School nurses
 - Districts/counties educational presentations
- HUGE response—everyone wants to participate!

Progress

- GPC has enrolled over 690 people so far
- GDPH has received ticks from 360 people so far
- Goal is to run project for a year, but depends on number of ticks submitted (funding)



ANY QUESTIONS?

